When Negotiation Leads to Inequality: An Examination of Two-tier provisions in Canadian Collective Labour agreements

Mélanie Laroche, Université de Montréal, <u>melanie.laroche.2@umontreal.ca</u> Frédéric Lauzon Duguay, Université de Montréal, <u>frederic.lauzon.duguay@umontreal.ca</u> Patrice Jalette, Université de Montréal, <u>patrice.jalette@umontreal.ca</u>

Historically, trade unions have embodied a social force leading to greater democratization of the workplace, helping to ensure a balance of power in the employment relationship. Trade union presence and the rate of collective bargaining coverage have thus been associated with a reduction in income inequality, an increase in the minimum wage and greater industrial democracy (Freeman & Medoff, 1984; Freeman 2005; OECD, 2011). This wage-levelling effect appears to be stronger where union density is higher (Aidt & Tzannatos 2002; Koeniger et al. 2007, Tzannatos, 2008) and where collective bargaining is centralized (OECD 2004; Aidt and Tzannatos 2002). On the other hand, studies have shown that a decline in union membership in several countries has contributed to a rise in income inequality (OCDE 2011; Jaumotte & Osorio Buitron, 2015). A recent paper by the International Labor Organization (ILO) in a volume edited by Berg (2015), clearly showed that a reduction in inequality is contingent on a strengthening of labor market institutions, notably collective bargaining and various labor laws, and institutions that allow for income redistribution. Another study have shown that a reduction in bargaining coverage contributes significantly to rising wage inequality (Bosch 2015) and to bargaining outcomes that allow for higher wage flexibility (Antonczyk et al. 2010).

Nevertheless, it must be recognized that, despite union action (Aidt & Tzannatos, 2002; Betcherman, 2013), recent decades have clearly been marked by profound upheavals, leading to a notable increase in inequality, even within nations (Hayter, 2011; Bourguignon, 2012, Piketti, 2014). While ideally, as noted by Bosch (2015), through their strategies and actions, unions should be able to increase the rate of unionization and thus enjoy greater bargaining power, the current context does not appear to favor such a scenario. In a period characterized by weak trade unionism and an all-out neo-liberal offensive, the coverage rate of collective agreements cannot grow to the extent needed to eliminate inequality. Indeed, even in unionized

workplaces, wage gaps have emerged or widened. In Canada, for example, employers have greatly succeeded in flexibilizing the content of collective agreements (Jalette & Laroche, 2010) and reducing the protections traditionally provided to "regular" employees, in particular by introducing two-tier compensation provisions (Lauzon-Duguay, Jalette & Hallé 2010). Other gaps have also been found between these workers and atypical workers with regard to the various working conditions set out in collective agreements (e.g. seniority, job security, differentiated access to the grievance procedure) (Laroche, 2012; Bernier, 2007). Is this a red flag, indicating that collective bargaining no longer has the capacity to effectively play its primary role as a mechanism for worker protection and the promotion of equity, both internally and externally, with regard to all aspects of work?

While many studies have attempted to quantify wage gaps or better understand their effects (Jacoby & Mitchell 1986; Martin & Peterson 1987; Capelli & Sherer 1990; Martin & Heetderks 1990; Thomas & Kleiner 1992; Gordon et al. 2008), this article aims to analyze the main determinants of the presence of two-tier provisions in collective agreements, a subject that has received little attention to date. Our analysis is based on data provided by the ministère du Travail du Québec (Quebec Ministry of Labour), which we used to construct a database of all collective agreements in force in the private sector in Quebec on December 31, 2012 (N=5285), as well as data for the same period provided by the Institut de la statistique du Québec (Quebec's statistics agency). Multivariate statistical analyses were conducted to assess and control for the influence of various factors. This Canadian province was selected due to the configuration of its industrial relations system. Indeed, since there appears to be greater inequality in decentralized bargaining systems (Kristal & Cohen, 2007), mainly due to declining union power, the industrial relations system in Quebec appeared to offer a particularly rich field for study given that it is oriented towards firm-level collective bargaining.

The first section of this article describes in detail the various types of two-tier provisions found in labor contracts negotiated at the firm level. It also addresses the main factors explaining the sources of these provisions in unionized settings, presenting a considerable number of postulates put forward in the literature in order to better understand the logic underlying their adoption in collective agreements. The second section presents the methodological strategies used in our research. The third section presents the main findings that emerged from our analysis, shedding light on various possible explanations proposed in the industrial relations literature, such as economic factors, (economic crisis, regional unemployment rate, corporate dept level, productivity), coercive comparisons (sectoral ou regional context), the workforce

profile in a given industrial sector, unions capacities and resources (bargaining power, age of union, union leaves) or other forms of concessions linked two-tier compensation provisions. Our goal is to better understand the role and influence of actors on the outcomes of bargaining. More generally, our investigation is in line with studies related to institutional work (Lawrence, 2011), aiming to better understand how actors influence institutions. The relationship between institutions and action is seen to be recursive: the institution provides a framework for action while action, in turn, influences both this framework and the regulatory mechanisms (Lawrence et al. 2009). The actor, endowed with the strategic capacity to determine the best path to follow in a given institutional context (Morgan & Hauptmeier 2014), can thus act to bring about change. In this article, we will investigate the changes that have taken place in the institution of collective bargaining and seek to better understand the extent to which this tool for equity has tended to become a tool for inequality under the influence of environmental pressures. We consider that, depending on their power, values and ideology, actors will favor or not favor the introduction of two-tier provisions in collective agreements as the preferred solution to economic pressures, justifying a downward revision of working conditions. The last section presents a discussion of our main study results and our conclusion.

1. Two-tier provisions: definition and developments

A two-tier provision establishes different working conditions for different groups of employees generally carrying out the same tasks in the same firm, based on the date they were hired (Rees, 1993; Chaison, 2012). In its most common form, a two-tier provision seeks to apply different wage scales to different groups of employees, on the basis of the hiring date, thus preventing new employees from gaining access to wages granted to an earlier generation of workers. As a general rule, such clauses provide for two-tier wage plans, with the pay scale for newly hired employees (Scale B) being less advantageous than that in place for previously hired employees (Scale A). These plans can be applied on a permanent or temporary basis (Cappelli & Sherer, 1990; Essick, 1987, Thomas & Kleiner, 1992; Rees, 1993, Townsend & Partridge, 1999; Mac Neil, 2013). In the latter case, the two pay scales will gradually converge over time. As aptly pointed out by Jacoby and Mitchell (1986), the lines between permanent and temporary plans can be blurred: for example, a wage gap that is to be maintained for the entire period covered by the collective agreement could be eliminated in a subsequent agreement and thus lose its permanent status. These provisions can take on various forms, such as multi-tier wage structures (two or more pay scales or different wage rates,) for the same occupation, a lower entry-level wage, additional pay scales for newly-hired workers, less generous fringe benefits for newly hired workers, lack of job security for low-tier employees etc. They can apply in both unionized and non-unionized workplaces. In unionized workplaces, they are included in the collective agreement. The current study examined two-tier provisions found in collective agreements, a subject that has led to numerous debates regarding equity among workers (Adams, 1979; Hills, 1980; Martin & Peterson, 1987), fairness (Rees, 1993), and the union's duty of fair representation (Jacoby & Mitchell, 1986).

While the most classic type of two-tier provision essentially involves different pay scales for existing workers compared to newly hired workers, a broader definition of this notion is called for since these provisions have expanded to include various working conditions and can take many forms. Indeed, two-tier provisions can pertain to the length of the probationary period, fringe benefits, job security and even the workers' pension plan (Ministère du Travail, 1999a and b). They can also be based on employment status, taking various forms depending on whether the employee holds a part-time, casual or temporary position, or is employed by a temporary employment agency (Bernier, Vallée & Jobin; 2003).

To sum up, two-tier provisions can take many forms and raise many questions. In particular, what are the reasons for their adoption in collective agreements, and what are their consequences? The following sections address these questions, which have led to much debate in recent years.

Two-tier provisions: a development imposed by employers

Since the 1980s, the collective bargaining process has undergone significant changes. According to Chaison (2012), two waves of change have transformed the face of collective bargaining. The first took place in the 1980s and was characterized by employer demands for significant concessions in response to pressures from competitors with lower labor costs. The second wave of transformation, which has been underway since the early 2000s, can be characterized as ultra-concession bargaining, as employers no longer have to commit to the traditional guarantees in exchange for flexibility or labor cost concessions. This transformation in the very logic underlying collective bargaining is, moreover, occuring in a context wherein new organizational strategies aimed at achieving greater flexibility and new government policies have changed the balance of power between the parties (Jalette & Laroche, 2010).

Various organizational strategies have thus been deployed to adapt to the new requirements of the globalized economy: work organization has undergone a profound transformation involving, in particular, a diversification of the forms of employment, greater job precarity, production offshoring and domestic or global outsourcing. In some cases, the bargaining parties have considered two-tier provisions as an alternative or as complementary to these cost-cutting strategies. While two-tier provisions can be traced back to the 1960s (Martin, 1990), it was the subsequent economic crises, in particular in the 1980s, that "institutionalized" recourse to these provisions in the collective agreement (Rees, 1993). The goal was to respond to the economic pressures stemming from rising imports and non-unionized firms. These provisions have sometimes been seen as the best way to bring down labor costs without angering senior workers (Townsend & Partridge, 1999), especially given that across-the-board wage decreases have generally been associated with a negative impact on employee morale and productivity (Bewley, 1999).

In the United States, this phenomenon first emerged in the food industry in the early 1960s (Martin, 1990) followed by the air transport industry in the 1970s (Gallun, 1999). However, it was mainly during the 1980s, as a result of the financial difficulties experienced by many unionized firms, as well as market deregulation and increasing competition from non-unionized firms (Walsh 1988; Ichniowski & Delaney 1990; Rees, 1993), that two-tier provisions became more widespread. Although concession bargaining subsequently receded until the early 2000s, the prevalence of these provisions nevertheless remained stable in collective agreements. Thus, the proportion of workers affected by two-tier wage plans rose from 2% of workers covered by a collective agreement in 1981 to 33% in 1985, and remained as high as 31% in 2008 (Chaison, 2008).

In Canada, two-tier provisions emerged during the recessions of the 1980s and 1990s, in the same industries as in the United States, in particular, the air transport industry and the wholesale and retail trade sector (Walker, 1987). While many of these provisions subsequently disappeared, some of them persisted in the retail sector in spite of the economic recovery. In Quebec, two-tier provisions first emerged in the trade and municipal government sectors, the latter being forced by the Government of Québec in the late 1990s to reduce their wage bill by 6%. Studies conducted in the 1990s revealed that the percentage of collective agreements including multi-tier wage structures (two or more tiers) varied over the years from 2.6% to 8.0% (Turcot, 1992; Ministère du Travail du Québec, 1998a, 1998b). These results might suggest that such measures were merely a passing phenomenon, a temporary response to the economic situation. However, other studies conducted in the late 1990s, adopting a broader perspective of

this issue, considering not only wages but also hours of work, public holidays, annual leave, rest days, family-related leave, work uniforms and the length of the probationary period (Ministère du Travail du Québec, 1999a, 1999b), painted a completely different picture (Lauzon-Duguay, Jalette & Hallé, 2010). In fact, these studies showed that 80% of collective agreements in the food industry, 40% of those in the municipal government sector and 20% of those in the manufacturing sector included two-tier provisions. Of the 2029 collective agreements registered with the Quebec Ministry of Labour in 2013, approximately 14.5% included two-tier provisions pertaining to various working conditions, covering approximately 16.5% of workers (MTQ 2015).

These findings show that two-tier provisions were not just a passing phenomenon. On the contrary, they have persisted and have taken on increasingly varied forms. As noted by Mac Neil (2013), the 2008 financial crisis led to a resurgence of the need for American and Canadian employers to cut labor costs and one of the best ways to accomplish this is still to impose the introduction of a two-tier wage scale in collective agreements, while also granting less generous fringe benefits to new employees. One of the leading trends has been the aim to lower the costs associated with pension plans, with employers currently pushing for new employees to be covered by a defined contribution plan while older employees continue to enjoy a defined benefit plan.

Short-term industrial peace leading to conflict: issues raised by two-tier provisions

Recourse to two-tier provisions as an alternative to the various concessions demanded by employers has raised a number of questions and led to heated debates, both within the community of practitioners and among researchers. In unionized settings, these provisions constitute various codified arrangements in the collective agreement, representing compromises negotiated by the bargaining parties. It is worth noting, however, that these compromises stem from employer initiatives, with significant pressure to cut labor costs. In some cases, the employers have preferred to avoid these provisions, considering that they might have negative effects on newly hired workers, such as a loss of motivation or an increase in employee turnover (Chaison, 2008). Others, however, feel that these provisions still represent the best way to control labor costs and survive the competition from firms with lower labor costs (Jacoby & Michell, 1986).

These compromises, often negotiated under threat, have raised a number of questions and pose significant challenges for union organizations. Two-tier provisions are criticized because they

challenge the principle of equity, the basic tenet of equal pay for equal work so dear to union organizations (Malveaux, 1986, Martin & Peterson, 1987). As Martin & Peterson (1987) point out, the "low tier employees" affected by these provisions are bound to become aware of the unfair treatment to which they are subject compared to an internal referent (workers in the "high tier") or external referent (other workers in the labor market). Union organizations, sometimes believing that this is the only way to save threatened jobs, have thus agreed to violate a basic union tenet regarding pay equity across workers. More generally, adopting two-tier provisions violates the principles of equity and fairness in the determination of wages (Rees, 1993) and working conditions.

Introducing two-tier provisions in collective agreements also challenges the unions' duty of fair representation to employees in their bargaining units (Jacoby & Mitchell, 1987; Mac Neil, 2013). It may be asked whether it is in the interest of low-tier employees to file a complaint when they feel that their interests have been neglected by their union. While, in most Canadian jurisdictions, this duty is recognized and extends not only to collective bargaining but also to the representation of employees in the grievance arbitration process (Mac Neil, 2013), case law has shown that recourse exercised by employees who have been affected by two-tier provisions on the grounds of a failure of the duty of fair representation by their union has not been the most effective way to force the withdrawal of such provisions from collective agreements (Mac Neil, 2013). While the decisions rendered in these cases have raised the issue of equity, broad discretion has nevertheless been granted to the union organizations to manage this type of complaint.

This lack of voice on the part of an entire category of employees is likely to create serious tensions within the group of workers and significantly weaken internal solidarity (Rose & Chaison, 1996; Dufour-Poirier & Laroche, 2015). Although two-tier provisions are negotiated, they have also been criticized by union organizations, fearing that they will sow divisions within the ranks, especially as low-tier employees become increasingly representative and begin to express their opposition and discontent (Jacoby & Mitchell, 1987). Indeed, protest movements within union organizations have been organized to denounce this situation, deemed to be unfair and discriminatory. For example, campaigns to eliminate two-tier provisions have been organized by young teachers in Quebec (Legault, 2009) and by auto workers (Chaison, 2008; Chapman, 2015). The tensions within employee groups can be so serious as to lead the employees targeted by these provisions to question the very legitimacy of the union actor,

whose effectiveness as a bargaining agent has been harshly criticized (Chaison, 2008).

These findings show that two-tier provisions can lead to serious debates within union organizations, and workplaces in general. The various issues surrounding the adoption of these provisions call for a closer examination of the factors explaining their adoption in collective agreements, over and above the effects they produce.

The determinants of two-tier provisions

The vast majority of studies examining two-tier provisions were conducted in the 1980s and 90s and mainly aimed to better understand the effects of these provisions in financial terms and with regard to the attitudes of the employer and union actors concerned (Jacoby & Mitchell, 1986; Martin & Peterson, 1987; Capelli & Sherer, 1990; Martin & Heetderks, 1990; Thomas & Kleiner, 1992; Gordon et al., 2008). The recent literature does not address this question, which nevertheless remains highly relevant and continues to cause divisions among union actors and workers, who are already under pressure from many other environmental factors. In seeking to identify the main determinants of the presence or absence of two-tier provisions in collective agreements, we thus hope to contribute significantly to this literature. In this section, we will present the premises that guided our analysis.

Thus, we seek to identify the factors that influence the actors' decision to adopt or not adopt twotier provisions. Based on the collective bargaining literature, we propose five (5) possible explanations for the adoption of these provisions, namely, economic factors and firm performance, coercive comparisons, the workforce profile, union capacities and resources and concessions related to the content of the collective agreement.

Economic factors and firm performance

The external environment has long been recognized to have a considerable impact on the bargaining process and its outcomes (Katz & Kochan, 2004). In recent decades, studies on collective bargaining have mainly focused on economic factors, which have profoundly transformed the traditional balance of power between the actors, calling into question the capacity of collective bargaining to act as a countervailing power to the employer's interests in the determination of working conditions (Freeman, 2011). The impact of economic factors, often put forward to explain the use of two-tier provisions, has long been recognized in the industrial

relations literature (Jacoby & Mitchell 1986; Walker, 1987; Walsh 1988; Ichniowski & Delaney 1990; Martin & Heetderks, 1990; 1990; Rees, 1993; Chaison, 2007; Bunkley 2008). In fact, studies have shown that the increased recourse to these provisions can be explained by the financial difficulties experienced by firms and the opening up of markets, which has exposed firms to international competition from firms with lower labor costs These studies have also shown that two-tier provisions have mainly represented an alternative for actors during periods characterized by strong employer demands for concessions, generally associated with periods of recession or economic crises, and that their prevalence subsequently decreases when the economy recovers.

According to this logic, as noted by Mac Neil (2013), the economic and financial crisis of 2008 thus provided a significant incentive for employers to resort to two-tier provisions in an effort to reduce labor costs. In line with the prevailing discourse, adopting these provisions is seen as the only way to avoid plant closures and associated job losses (Barkholz, 2007; Chaison, 2007). When unemployment is high, we would thus expect collective agreements to contain a high number of two-tier provisions. The financial health of firms, while difficult to grasp, is also an important variable to include in this analysis. Indeed, this variable, central to the analysis of bargaining power (Kochan & Katz, 1988; Sexton, 2001), appears to be directly related to the decision to cut labor costs, which then involves a decision as to how to achieve these cuts. Firms that are grappling with serious financial difficulties might thus be more inclined to resort to two-tier provisions. A similar logic applies to firm productivity, as productivity gains are usually behind improvements in real income (Englander & Gurney, 1994). When productivity gains are lower, the risk of conflict over how these gains will be divided up increases, as does the likelihood of resorting to two-tier provisions.

Coercive comparisons

It has long been recognized that the bargaining process is directly influenced by both formal bargaining structures, aimed at employees and employers who are legally bound by the collective agreement, and informal bargaining structures, involving individuals who are affected by the outcomes of a bargaining process that does not directly concern them (Kochan & Katz, 1988; Katz & Kochan, 2004). It should thus be understood that a collective agreement concluded in a specific bargaining unit can affect the content of agreements negotiated in other units in the same firm, sector, region, etc.

Every collective bargaining process thus involves some form of comparison aimed at enabling the parties to adopt the same or similar measures as those adopted by other organizations in the same "organizational field" (Marginson & Sisson, 2004). Ross (1948) introduced the concept of "orbits of coercive comparison" to describe the tendency in collective bargaining to seek to match the working conditions provided in other workplaces. For employees and their union, the notions of fairness and equity play an essential role in setting their expectations regarding the targeted bargaining outcomes. As Brown and Sisson (1975) point out, this perception of fairness and equity is necessarily shaped by comparisons both within and outside the workplace.

Workforce profile

Studies on two-tier provisions have shown that the latter often target specific categories of workers, to the extent that they are sometimes seen to be discriminatory (Jacoby & Mitchell, 1986; Bernier, 2015). Indeed, two-tier provisions based on the hiring date effectively introduce poorer working conditions for newly hired employees, who are often young workers, women and immigrants (Bernier, 2015). Studies have shown that atypical jobs and "flexible" jobs, which are often held by these same categories of workers, are associated with poorer working conditions (Barbieri & Scherer, 2009; Burgoon & Dekker, 2010; Kalleberg, 2009; Keller & Seifert, 2013). We might thus expect to see a relatively high prevalence of two-tier provisions in collective agreements in sectors characterized by this workforce profile.

Union capacities and resources

Previous studies have shown that lower unionization rates are associated with lower benefits for workers (Jaumotte & Ossorio Buittron, 2015). Union density, used in many studies as an indicator of union power, has been positively associated with a reduction in inequality in workplaces (Kenworthy & Pontusson, Lin & Tomaskovic-Devey, 2013; Moller et al., 2003; Western & Rosenfeld, 2011; Karyssey, 2015). Through their role as bargaining agents, unions with significant power resources can effectively influence the distribution of resources. According to this logic, the most powerful unions may be better able to resist employer demands for concessions at the bargaining table, including two-tier provisions. As mentioned earlier, some unions, seeing their bargaining power weakened and being forced to make concessions, have chosen to agree to two-tier provisions, believing them to be the only alternative to job losses (Chaison, 2007). We thus expected unions with greater power resources to have a greater capacity to resist employer demands for concessions, including the introduction of two-tier provisions.

Concessions negotiated by the parties

The prevailing discourse aimed at justifying the recourse to two-tier provisions in collective agreements also puts forward the employers' need for flexibility, both in terms of work organization and wages. In the early 2000s, the logic of collective bargaining underwent a considerable transformation, allowing employers to demand significant concessions on work organization, seniority, wages and other benefits (Chaison, 2012; Jalette & Laroche, 2010). It must be understood that two-tier provisions tend to be adopted in this kind of concession-driven dynamic and will thus most certainly be found in collective agreements that focus on flexibility to the detriment of workers' security.

2. DATA AND SOURCES

The data used in this research were mainly provided by the Québec Ministry of Labour, which analyzes and codifies various aspects of the content of all labor contracts signed by the parties in the province. The parties are legally required to send a copy of the labor contract they have agreed on to the Ministry, which also collects administrative information on the local union and management. Other information on the prevailing economic context in Québec was obtained from the *Institut de la statistique du Québec*.

The database we constructed contains information on the entire population of 5,285 collective agreements in force on 31 December 2012 in Quebec's private sector. This research was based on a cross-sectional analysis comparing collective agreements at a given moment in time.

A short description, descriptive statistics and the expected sign of each variable are presented in Table 1. In addition to the dependent variables and control variables, this table lists the independent variables, classified into the following groups corresponding to the theoretical factors described in the previous section: economic factors and firm performance, coercive comparisons, the workforce profile, union capacities and resources and concessions related to the content of the collective agreement.

Dependent variables. Our dependent variables referred to two types of two-tier provisions. The first, two-tier compensation provisions, was a dummy variable for two-tier wage plans, covering, for example, clauses providing for a lower entry-level wage, lower wages for certain categories of employees, the creation of new categories with lower wages, a longer period before reaching

the top wage level, less generous benefits for low-tier employees, etc. This type of two-tier provision was found in 6.8% of the collective agreements included in our study. The second, two-tier job security provisions, was a dummy variable for two-tier job security arrangements (lack of job security for low-tier employees, different work schedules, longer period required to become a permanent employee, etc.), found in 4.5% of the collective agreements included in our study.

Table 1

Summary Statistics

Number of Observations = 5,285

Variables	Description	Mean	Standard Deviation	Expected Signs
Dependent Variables				
Two-tier compensation provisions	Dummy for two-tier wage plans (lower entry-level wage, lower wages for certain categories of employees, creation of new categories with lower wages, longer period before reaching top wage level, less generous benefits for low- tier employees)	.0681	.25197	
Two-tier job security provisions	Dummy for two-tier job security arrangements (lack of job security for low-tier employees, longer period required to become a permanent employee)	.0448	.20698	
Independent Variables				

Eonomic Factors and				
Firm Performance				
-Economic Crisis	Dummy for the 2008-2012	.9177	.27486	
	economic crisis	.9177	.27400	+
-Regional	Annual regional			
Unemployment	unemployment rate (signature	7.7301	.92615	+
Rate	year minus 1)			
-Corporate Debt	Debt ratio (liabilities/assets) of	.6131	.08499	
Level	firms by sector (signature year			+
	minus 1)			
	lillinus 1)			
-Productivity	Level of productivity (value	3.4269	3.55457	
	added?) by category (0-13 –			
	truncated continued) by sector			-
	(signature year minus 1)			
Coercive Comparisons				
-Urban Regions	Dummy for Montreal, Laval,	.2664	.44213	
orbuit Regions	Greater Quebec City &	.2001		_
				-
	Outaouais regions			
-Manufacturing	Dummy for manufacturing	.3264	.46894	+
	sector			
-Resource-based	Dummy for resource-based	.0229	.14958	
	sector			+
- Wholesale and	Dummy for wholesale and	2422	.42913	
Retail	retail trade sector	.2433	.42913	+
Workforce Profile				

-Women	Percentage of women in the	.4310	.17229	
	sector			+
-Young Workers	Percentage of young workers	.2593	.11196	+
	(under 30 years of age) in the			т
	sector			
Union Capacities and				
Resources				
-External Union	Percentage of unionized			
Bargaining Power	workers in the sector	.4599	.27397	-
	represented by the union confederation			
	confederation			
- Unionization Rate	Percentage of unionized	.3258	.16376	-
	workers in the sector			
-Internal Union	Number of workers in the	61.70	129.17	
Power	bargaining unit	01.70	129.17	-
-Age of Union	Number of years since the local	15.20	11.67	-
	union had been certified	10.20		
- Resources – Union	Dummy for full-time union	.6339	.48179	
Leave	leave for union representatives	.0339	.40179	
Concessions				
-New Forms of	Dummy for the planned	.0225	.14837	
Work Organization	implementation of changes in			Ŧ
	work organization, e.g.			+
	production team and telework			

-Employer- centered Flexibility	Dummy for lack of restrictions on outsourcing	.3758	.48437	+
-Job Security	Dummy for job security provisions	.0163	.12653	+
-Employer Contributions to Employee Benefits	Dummy for employer contributions to group insurance and pension plans	.7359	.44092	+
Control Variables				
Labor Contract Duration	Length in years	4.3650	1.65677	+
First Agreement	Dummy variable indicating whether or not the agreement was the first concluded between the parties	.0763	.26543	-

Economic factors and firm performance. Four indicators were used to get a better grasp of the economic context in which the negotiations took place and to measure firm performance. The first indicator concerned the timing of the negotiations, that is, whether the collective agreements were negotiated prior to or as of the 2008 economic crisis leading to a severe recession lasting until 2012. The context of this crisis, according to previous studies, was conducive to the adoption or the reconduction of two-tier provisions. The second indicator was the regional unemployment rate during the year before the signing of the contract, which measured the real uncertainty in the local labor market at the time the contract was being negotiated. This indicator was expected to be positively associated with the presence of two-tier provisions. The third and fourth indicators were introduced into the model to analyze the impact of firm performance at the debt ratio (liabilities/assets) of firms in the sector the year before the signing of the contract, was expected to be positively associated with the presence of two-tier provisions. The firm productivity indicator assessed the extent to which firms were able to share in the gains made at

the time the contract was being negotiated. This indicator was expected to be negatively associated with the presence of two-tier provisions.

Coercive comparisons. As explained above, the bargaining parties are subject to distinct pressures and logics in each industry sector. Certain collective agreement models or practices, such as the adoption of two-tier provisions, are thus systematically applied. Comparisons can be made on the basis of a given industrial sector or region. However, due to the high correlations between industry and region, we selected four indicators to avoid the problem of multi-collinearity. According to our preliminary analyses, the prevalence of two-tier provisions appeared to be higher in resource-based regions, and lower in urban regions. Moreover, based on the literature, we expected the prevalence of two-tier provisions to be higher in the manufacturing and wholesale and retail trade sectors.

Workforce profile. Two indicators were used in the analysis to determine which categories of workers were most affected by two-tier provisions. Studies have shown that women, young workers, immigrants and atypical workers are often targeted by these provisions. Given the strong correlations between these different categories of workers, we chose two indicators, namely, the percentage of women and the percentage of young workers in the sector, in order to avoid the problem of multi-collinearity. We expected the prevalence of both women and young workers in a given sector to be positively associated with the prevalence of two-tier provisions in this sector.

Union capacities and resources. The power of the actors, and more specifically the union actor, was measured using five indicators. The first indicator, external union bargaining power, was proxied by the percentage of the unionized workforce in the sector represented by the union confederation to which the local union was affiliated. Greater union bargaining power was expected to be negatively associated with the presence of two-tier provisions. Following the same logic, the second indicator, the unionization rate, referring to the percentage of unionized workers in a given sector, was also expected to be negatively associated with these clauses. The third indicator, the number of workers in the bargaining unit, represents another source of power (internal) for the union and was expected to be negatively associated with the presence of two-tier provisions in the collective agreements. The fourth indicator, the "age" of the local union (number of years since it had been certified) was considered a proxy for union capacities and resources, such as collective bargaining and mobilization experience, and was expected to be associated with fewer two-tier provisions in the labor contracts. The fifth indicator, union leave as

a resource, was a dummy variable for provisions in the collective agreement granting full-time union leave. Full-time union leave can be considered an important resource for union organizations because such leave can help to maintain an active union life. Thus, in line with the other union resources studied here, we expected that unions that had the benefit of full-time union leave would have a greater capacity to avoid the introduction of two-tier provisions.

Concessions. A last set of four indicators was created to determine whether two-tier provisions were generally associated with other types of union concessions in the collective agreement or whether they appeared in a context in which workers had managed to negotiate some acquired rights. We chose to focus on two indicators of flexibility sought by the employer and two indicators related to the workers' need for job security. The first indicator, new forms of work organization, was a dummy variable for the planned implementation of changes in work organization (e.g. production team, telework, etc.). The second indicator, employer-centered flexibility, aimed to reflect a lack of restrictions on outsourcing. The prevalence of two-tier provisions was expected to be higher in collective agreements containing provisions allowing for such flexibility. The third indicator, provisions ensuring job security for workers, and the fourth indicator, employer contributions to employee benefits (group insurance and pension plans), were also expected to be positively associated with the presence of two-tier provisions. Over the last decade, there has been a tendency to provide greater security to permanent employees, while allowing the working conditions of a growing part of the workforce to become more precarious (Jalette & Laroche, 2010). We thus expected that collective agreements including job security provisions would be more likely to include two-tier provisions. Since an overall reduction in wages and benefits is not a solution that is highly favored by employers or unions, the introduction of two-tier provisions is sometimes chosen to reduce the cost of acquired rights.

Control variables. To bring out the effects of the independent variables, we introduced two control variables into the model. The first of these was a first contract dummy, which was necessary because two-tier provisions are not usually introduced the first time an agreement is negotiated between the parties. The second control variable was labor contract duration. Given that the results of a previous study (Laroche, Jalette & Lauzon-Duguay, 2015) brought out a significant difference with regard to two-tier provisions between short-term collective agreements (3 years and under) and long-term collective agreements (5 years and over), we decided that it would be relevant to include this control variable in the current study.

3. RESULTS

To test our hypotheses, we conducted a logistic regression for each of the dependent variables, namely, two-tier compensation provisions and two-tier job security provisions. Prior to the logistic regressions, various preliminary tests were successfully performed and showed no multi-collinearity problems, all values being within the acceptable limits.

The first logistic regression concerned our first dependent variable, two-tier compensation provisions. The results show, first of all, that none of the indicators assessing environmental pressures were significantly associated with these provisions, although the coefficients had the expected signs (see Table 2).

Table 2: Logistic Regressions

	Two	o-tier	compe	ensatio	n						
	provisions					Two-1	Two-tier job security provisions				
	в	SE	OR Exp		ifidence Il (95%)	в	SE	OR Exp		nfidence al (95%)	
VARIABLES			(B)	Lower	Upper			(B)	Lower	Upper	
Environmental											
pressures Economic Crisis	.050	.223	1.051	1.473	1.626	.016	.293	1.016	1.749	1.805	
Regional Unemployment Rate	.006	.061	1.006	1.120	1.134	.115	.082	1.121	1.048	1.317	
Corporate Debt Level	.070	.056	1.072	1.040	1.195	0.256**	.079	1.291	1.106	1.508	
Productivity	030	.017	1.030	1.004	1.065	023	.023	1.023	1.022	1.071	
Coercive Comparisons											
Urban Regions	-0.292*	.147	1.338	1.002	1.787	164	.176	1.178	1.199	1.664	
Manufacturing	0.515**	.171	1.673	1.197	2.339						
Resource-based	439	.401	1.552	1.415	3.408	1.252	.671	3.497	1.066	13.040	
Wholesale and Retail						2.018***	.258	7.523	4.540	12.466	
Workforce profile											
Women	-3.491***	.724	32.804	7.941	135.51 6	1.039	.846	2.826	1.859	14.850	
Young Workers	122	.969	1.130	5.913	7.547	2.906*	1.162	18.281	1.874	178.329	

Union Capacities		1								
and Resources										
External Union	0.400±		4 500	4 000	0.004	4 0 0 0 1 1 1 1		0.407		10.047
Bargaining Power	-0.429*	.205	1.536	1.028	2.294	1.862***	.332	6.435	3.354	12.347
Unionization Rate	-1.276*	.530	3.584	1.267	10.135	1.77**	.884	5.868	1.037	33.216
Internal Union Power	073	.108	1.075	1.150	1.330	0.67***	.170	1.954	1.402	2.725
Age of Union	0.009*	.005	1.009	1.000	1.018	.011	.007	1.011	1.002	1.024
Resources – Union	0.02.4*	440	4 904	4 007	4 507	0.56**	400	4 754	4 000	0.500
Leave	-0.234*	.116	1.264	1.007	1.587	0.50	.189	1.751	1.208	2.538
Concessions										
New Forms of Work	0.858**	.267	2.359	1.399	3.977	660	461	1.052	1 265	4 000
Organization	0.050	.207	2.359	1.599	3.977	.669	.461	1.952	1.265	4.822
Employer-centered	0.24*	.116	1.271	1.012	1.596	.068	156	1.070	1.269	1.454
Flexibility	0.24	.110	1.271	1.012	1.596	.000	.156	1.070	1.209	1.434
Job Security	-1.229	.724	3.418	1.210	14.127	2.096***	.380	8.137	3.861	17.149
Employer										
Contributions to	.163	.140	1.177	1.116	1.548	0.682**	.243	1.977	1.228	3.185
Employee Benefits										
Control Variables										
Labor Contract	0.095**	.036	1.100	1.025	1.181	030	.053	1.031	1.076	1.143
Duration	0.035	.030	1.100	1.025	1.101	050	.000	1.031	1.070	1.145
First Agreement	332	.317	1.394	1.336	2.596	-2.796**	1.020	16.386	2.220	120.968
Constant	127	1.26 4				-12.786	1.906			
−2 log likelihood	2461.243					1458.557				
Nagelkerke R2	.079				.281					
n (number of			5276					5276		
cases)			5270					5210		

With regard to coercive comparisons, the results show that both region and industry sector were associated with the presence of two-tier compensation provisions. More specifically, the collective agreements of firms located in urban regions presented fewer two-tier compensation provisions than those of firms located in non-urban regions. As for industry sector, the manufacturing sector was significantly associated with this first dependent variable, whereas the resource-based sector was not. Thus, the collective agreements of firms in the manufacturing

sector were more likely to contain two-tier compensation provisions. However, contrary to our expectations, this was not the case for firms in the resource-based sector.

The workforce profile of the sector also played a role in explaining two-tier compensation provisions. More specifically, the percentage of women in the sector was significantly associated with these provisions. However, the direction of this relationship was contrary to our expectations. Thus, the lower the percentage of women in the sector, the greater the likelihood that the collective agreement would contain two-tier compensation provisions. The percentage of young workers, for its part, was not statistically associated with this dependent variable.

As for union capacities and resources, the results are generally in line with our hypotheses. The first indicator, external union bargaining power, was negatively associated with the presence of two-tier compensation provisions. The greater this power, the less likely the presence of two-tier compensation provisions. The second indicator, the unionization rate in the sector, was also negatively associated with these provisions. Thus, a high rate of unionization in the sector decreased the likelihood that the collective agreement would contain these provisions. The third indicator, internal union power, on the other hand, was not significantly associated with the presence of this dependent variable. However, the fourth indicator, the age of the local union, appeared to play a positive role in the presence of two-tier compensation provisions. Thus, the older the bargaining unit, the more likely the presence of these provisions. The fifth and last indicator, union leave as a resource, was also significantly but negatively associated with the presence of these provisions. Thus, the lower the number of union representatives granted full-time union leave, the greater the likelihood that the collective agreement would contain two-tier compensation provisions.

As for concessions related to the content of the collective agreement, the results indicate that these concessions helped explain the presence of two-tier compensation provisions. The first indicator, new forms of work organization, was positively associated with the presence of these provisions. The same was true for the second indicator, employer-centered flexibility. Thus, the fewer the restrictions on outsourcing in the collective agreement, the greater the likelihood that the latter would contain two-tier compensation provisions. However, the third and fourth indicators, job security provisions and employer contributions to employee benefits, were not statistically associated with the presence of these provisions.

Lastly, with regard to our control variables, only labor contract duration was statistically and significantly associated with the presence of two-tier compensation provisions. In other words,

the longer the duration of the collective agreement, the greater the likelihood that it would contain these provisions .

The second logistic regression concerned our second control variable, two-tier job security provisions. The results show, first of all, that, of the four indicators assessing environmental pressures, only the corporate debt level was significantly associated with these provisions. Thus, the higher the corporate debt level, the greater the likelihood that the collective agreement would contain two-tier job security provisions. It should be noted that the economic crisis, the regional unemployment rate, and firm productivity were not associated with these provisions.

With regard to coercive comparisons, the results indicate that, while the region had no effect on the presence of two-tier job security provisions, the industry sector did. In fact, a particular pattern of influence was found with regard to industry sector. The likelihood that the collective agreement would contain two-tier job security provisions was greater for firms in the wholesale and retail trade sector. As for firms in the resource-based sector, the result was in the expected direction but barely met the 0.05 threshold for statistical significance. These results suggest that sectoral logics play an important role in the presence of two-tier job security provisions and that coercive comparisons within the sector influence the adoption of these provisions.

The workforce profile of the sector also helped explain the second dependent variable. More specifically, contrary to the case for two-tier compensation provisions, an association was found between two-tier job security provisions and the percentage of young workers in the sector, but not the percentage of women. Thus, the higher the percentage of young workers in the sector, the greater the likelihood that the collective agreement would contain two-tier job security provisions, whereas the percentage of women was not linked to this dependent variable.

As for union capacities and resources, the results concerning two-tier job security provisions contrast with those concerning two-tier compensation provisions. The first indicator, external union bargaining power, was positively associated with the presence of two-tier job security provisions. In other words, the greater this power, the more likely the presence of two-tier job security provisions. The second indicator, the unionization rate in the sector concerned, was also positively associated with these provisions. Thus, the higher the rate of unionization in a given sector, the greater the likelihood that the collective agreement would contain these provisions. The third indicator, internal union power, was also associated with the presence of two-tier job security provisions. Thus, the greater the internal union power, the more likely the presence of two-tier job security provisions. Thus, the greater the internal union power, the more likely the presence of two-tier job security provisions. Thus, the greater the internal union power, the more likely the presence of two-tier job security provisions. Thus, the greater the internal union power, the more likely the presence of these provisions. Thus, the age of the local union, was not significantly associated

with the presence of two-tier job security provisions. The fifth and last indicator, union leave as a resource, was positively associated with this second dependent variable, contrary to the results concerning the first dependent variable. Thus, the higher the number of union representatives granted full-time union leave, the greater the likelihood that the collective agreement would contain two-tier job security provisions.

The concessions negotiated by the parties also played a role in the presence of two-tier job security provisions. The first indicator, new forms of work organization, was not significantly associated with the presence of these provisions. The second indicator, employer-centered flexibility, was also non-significant in terms of explaining these provisions. In other words, the presence of provisions in the collective agreement allowing the employer more flexibility was not significantly associated with the likelihood that the collective agreement would contain two-tier job security provisions. However, the third and fourth indicators, job security provisions and employer contributions to employee benefits, were both associated with this dependent variable. Thus, the presence of job security provisions for previously hired employees increased the likelihood that two-tier job security provisions targeting newly hired employees would also be present. Moreover, when the employer contributed to the workers' group insurance and pension plans, there was also a greater likelihood that the collective agreement would contain two-tier job security provisions.

Lastly, with regard to our control variables, only the first agreement indicator was significantly associated with the second dependent variable. Thus, first collective agreements were not likely to contain two-tier job security provisions.

DISCUSSION AND CONCLUSION

Our results clearly demonstrate that the logic underlying the adoption of two-tier compensation provisions is different from that underlying the adoption of two-tier job security provisions. Different factors explained the presence of these two types of two-tier provisions, with the exception of three common factors. Thus, although the direction of these relationships was reversed, external union bargaining power, the unionization rate and union leave as a resource all explained the presence of both two-tier compensation provisions and two-tier job security provisions.

With regard to two-tier compensation provisions, the results are mostly as expected and relatively straightforward since the variables that proved to be significant in our study have

generally been associated with these provisions, in the same direction, in the literature. First, two-tier compensation provisions were found to be more prevalent in the manufacturing sector but less prevalent in sectors with a high percentage of women and in urban regions. These provisions appear to have been adopted based on a logic of coercive comparisons. The "new normal" calling for significant union concessions at the bargaining table thus appears to have made two-tier wage plans the model of choice in one organizational field, namely manufacturing. The result concerning sectors with a high percentage of women is surprising but can be explained by the nature of the issues involved and the strategic orientations adopted by unions. Indeed, the feminization of the workforce has led to significant changes in the collective values of workers (Hyman, 1997; Levesque, Murray & Le Queux, 1998), which will necessarily influence the demands made at the bargaining table. It has been recognized that women, who are concentrated in job ghettos associated with low wages, poor benefits and limited job security, have fought harder for pay equity and employment equity (Kumar & Acri, 1991). Indeed, our results indicate that, in sectors where women were highly represented, significantly fewer two-tier provisions pertaining to wages were negotiated.

As for union capacities and resources, two-tier compensation provisions were less prevalent when the rate of unionization in the sector was high, when the external union bargaining power was greater, and when the union had been able to negotiate clauses providing for full-time union leave, thus helping it to maintain ties with the workers. Only the result concerning the age of the local union was contrary to our expectations. It is possible that this indicator reflected the extent to which the union had managed to negotiate acquired rights or the maturity of the collective agreement. Indeed, the age of the local union is likely to be related to the average age of workers in the bargaining unit, and the maturity of the collective agreement. Given that two-tier compensation provisions were found where workers had been able to obtain better working conditions and improve their collective agreements, it is not surprising that the prevalence of these provisions was higher in older bargaining units compared to newer bargaining units, where the collective agreement and working conditions were yet to be constructed.

Lastly, our results suggest that two-tier compensation provisions were usually accompanied by other flexibility concessions such as the introduction in the collective agreement of clauses providing for new forms of work organization and allowing for outsourcing. The flexibility sought by the employer was thus not merely functional or numerical, but also affected wages.

Our second set of results, which refer to two-tier job security provisions, appears to be more complex and raises several questions. As expected, our results show that the prevalence of

these provisions was higher in sectors with a high level of corporate debt and in the wholesale and retail trade sector, suggesting here again the significance of the logic of coercive comparisons. The prevalence of these provisions was also higher in sectors with a high percentage of young workers. On the other hand, their prevalence was lower in first collective agreements. The analysis becomes more complex when the factors related to union power are considered. Indeed, the prevalence of two-tier job security provisions was higher where there was a high rate of unionization, greater external union bargaining power and greater internal union power, and when the union had managed to negotiate full-time union leave for its representatives. This surprising result suggests that, while unions with greater power resources have succeeded in limiting wage gaps, they have nevertheless made concessions when it comes to gaps in job security. Given the ever-present threat of company restructuring and offshoring, employers have thus managed to obtain concessions with regard to job security, even from unions with significant power resources. Taking a gamble, these unions have thus opted to accept a two-tier provision pertaining to job security in order to save current and future jobs.

With regard to concessions negotiated by the parties, two-tier job security provisions did not appear to have been accepted by the union in exchange for new forms of work organization or employer-centered flexibility, but rather as a way to protect the acquired rights of more senior employees, such as job security or fringe benefits such as employer-sponsored group insurance plans or pension plans. The unions thus appear to have believed that limiting newly hired employees' access to job security was the only way to conserve the job security provisions covering employees with greater seniority. Following the same logic, our results also suggest that, in exchange for benefits granted to some workers, employers may have sought to flexibilize their obligations by introducing two-tier provisions pertaining to one form of security or another, thus leading to an overall reduction in their obligations regarding employee benefits.

To sum up, our results suggest that the logic underlying the adoption of two-tier provisions is much more complex than was previously thought. Our results bring out contrasting logics and diverse actions and strategies, highlighting the importance of specifying the type of disparity in wages and working conditions concerned when explaining two-tier provisions. While these clauses have mainly been negotiated during periods of economic turbulence, being seen as the only alternative to job losses and a general decline in working conditions, our results suggest that the prevalence of these clauses can be explained by various factors that are not economic in nature. The fact that the unions did not deal in the same way with the two different types of two-tier provisions examined in this study clearly shows that the logic underlying the adoption of these clauses is influenced by factors that are more related to the dynamics between the bargaining parties, their power, and the content of the collective agreement. The sectoral logic also imposes certain models to be pursued at the bargaining table and two-tier provisions do not escape this logic.

Our results effectively show that the actors are not simply forced to succumb to the environmental pressures at play, but can respond in various ways depending on the sectoral logic influencing them, the power resources available to them, the workforce profile of the sector and the acquired rights they have managed to negotiate. It was also found that two-tier provisions represent concessions that the unions are forced to accept in order to conserve some rights or benefits obtained in the past. The logic underlying such a position is one of protecting the benefits of existing members. Thus, to avoid imposing concessions on all workers, a single group of workers is targeted to bear this burden. Going back to the idea that the union must make an imperfect choice regarding the concession it will agree to make, is it possible, as Nadeau maintains (2012: 10, trans.), that the choices made internally, the compromises accepted in the current context, will be eliminated over time, "as the years go by for workers in the firm, such that the advantages and disadvantages agreed to at the present time will eventually even out"?

Our results also make it possible to better situate the debate regarding the capacity of union organizations to truly promote the values of equity and fairness. The results highlighting the positive relationship between union power and two-tier job security provisions are quite eloquent in this regard. Even unions with greater power resources adopted these two-tier provisions. Our results are thus in line with Chaison's studies (2012) proposing a rather bleak view of the capacity of unions to make gains through collective bargaining. Indeed, the power of employers appears to be so great that they can now dictate the content of the collective agreement without even granting concessions to workers in exchange. Unions have thus decided to negotiate in favor of existing members of the bargaining unit and risk sacrificing future members. In fact, recent studies have shown that young workers, targeted by two-tier provisions, have difficulty seeing the usefulness and legitimacy of their union and feel that their interests are not being effectively represented (Dufour-Poirier & Laroche, 2015). While this is by no means a simple problem to resolve, union organizations should nevertheless address this issue, which is dividing union members and undermining solidarity within the ranks. Indeed, at a time when union

organizations are seeking to renew themselves and integrate the next generation of members, there are strong reasons to deal with the debate over two-tier provisions.

Our study certainly could not **capture all the subtleties** associated with the complex and dynamic social interactions involved in collective bargaining. For this reason, and due to the limitations of the administrative data available to us, the model we constructed represents an **oversimplification** of these complex concepts and relationships. Moreover, the **cross-sectional nature** of the research makes it impossible to draw definitive conclusions concerning causality. Lastly, it should also be noted that several factors, which are difficult to grasp, were not assessed, such as the labor relations history, the characteristics of the local union, and firm-level organizational performance. However, despite these limitations, we believe that this original research sheds new light on two-tier provisions. Our approach differs from that of previous studies in that we were able to identify the factors explaining the presence of two-tier provisions in collective agreements and, in particular, bring out different types of two-tier provisions, showing that the factors influencing them are not always the same.

Our results also raise some questions that merit further investigation. In particular, our understanding of the influence of economic factors on the different types of two-tier provisions could be deepened, notably by targeting factors that are more closely related to the situation of the firm rather than those relating to the sectoral level. A deeper reflection should also lead to a better understanding of why some unions with power resources and collective bargaining experience would agree to include two-tier provisions in their collective agreements, despite being aware of the negative effects that such clauses can have on the internal solidarity of the union. While our results suggest that the logic underlying the adoption of two-tier provisions is simply one of give-and-take between a lack of wage security or job security for newly hired employees and the protection of such security for more senior employees, this issue needs to be explored further. More generally, future studies are needed to better understand the logic of the actors who negotiate two-tier provisions in their collective agreements and determine whether such provisions merely fit into a logic of concessions or involve other, more complex, logics.

References

Aidt, T. and Tzannatos, Z. 2002. *Unions and Collective Bargaining: Economic Effects in a Global Environment*. Washington, DC: World Bank.

Antonczyk, D., Fitzenberger, D. and Sommerfeld, K. 2010. *Rising Wage Inequality, the Decline of Collective Bargaining and the Gender Wage Gap.* Discussion Paper No. 10-014. Germany: Institute for the Study of Labor.

Barbieri P, Scherer S. 2009. "Labour market flexibilization and its consequences in Italy". *European Sociological Review*, *25(6):* 677–692.

Barkholz, D. 2007. "Union Budges on 2-Tier Wage; Proposed Deals with GM Let Locals Organize Nonproduction Staff at Some Plants". *Automotive News*, August 20: 1.

Betcherman, G. 2012. *Labor Market Institutions. A Review of the Literature.* Policy Research Working Paper 6276. The World Bank Development Economics. Office of the Senior Vice President and Chief Economist

Berg, J. (Ed.). 2015. *Labour Market Institutions and Inequality. Building Just Societies in the 21st Century*. Cheltenham, UK : Edward Elgar Publishing and Geneva: ILO.

Bernier, J., 2007. "Les conventions collectives et les emplois atypiques", *Regards sur le travail*, 4(1): 2–17.

Bernier, J., Vallée, G. and Jobin, C. 2003. *Les besoins de protection sociale des personnes en situation de travail non traditionnelle*. Rapport final du Comité d'experts chargé de se pencher sur les besoins de protection sociale des personnes vivant une situation de travail non traditionnelle. Québec : Gouvernement du Québec.

Bourguignon, F. 2012. La mondialisation de l'inégalité. Paris: Seuil. 112 p.

Brown, W. and Sisson, K. 1975. "The use of comparisons in workplace wage determination". *British Journal of Industrial Relations*, 13(1): 25–53.

Bunkley, N. 2008. "GM, With an Eye on Profit, Invests in Ohio Plant." *New York Times*. August 22:C2.

Burgoon B and Dekker F. 2010. "Flexible employment, economic insecurity and social policy preferences in Europe". *Journal of European Social Policy*, *20(2): 126–141*.

Bureau of National Affairs. 1995. *Basic Patterns in Union Contracts*, *1995*. Washington, D.C.: BNA.

Bureau of National Affairs. 2008. *Employer Bargaining Objectives*, 2008. Washington, D.C.: BNA.

Bureau of National Affairs. 2007. "Airline Negotiations and the New Concessionary Bargaining." Journal of Labor Research , 28: 642–657.

Cappelli, P. and Sherer. P. D.1990. "Assessing Worker Attitudes under a Two-Tier Wage Plan." *Industrial and Labor Relations Review*, 43(2): 225–244.

Chaison, G. 2007. "Airline Negotiations and the New Concessionary Bargaining." *Journal of Labor Research*, 28: 642–657.

Chaison, 2008. "Two-tier Wage Settlements and the Legitimacy of American Unions. Paper presented at the 15th ILERA World Congress, December.

Chaison, G. 2012. The new collective bargaining. New York : Springer.

Chapman, 2015. « This Time, Fiat Chrysler Workers Approve Contracrt. *The New York Times*, October 22, 2015.

Dufour-Poirier, M. and Laroche, M. 2015. "Revitalising young workers' union participation: a comparative analysis of two organisations in Quebec (Canada)". *Industrial Relations Journal*, No. 121. Forthcoming.

Essick, C. 1987. "A Survey of Two-Tier Wage Systems." *Compensation and Benefits Management,* 3(summer): 229–32.

Freeman, R. B. 2005. *Labour Market Institutions without Blinders: The Debate over Flexibility and Labour Market Performance*. NBER Working Paper Series No. 11286. Cambridge, MA.

Gallun, A. 1999. "Wage Systems Lose Popularity Due to Morale Concerns." *The Business Journal*, (August 20) <www.bizjournals.com/milwaukee/stories/1999/08/23/focus.html>.

Gordon, D., Brown, A., Gardner, J., Oswald A.J. and Qian, J. 2008. "Does Wage Rank Affect Employees' Wellbeing?" Industrial Relations 47(3): 355–389.

Hayter, S. 2011. *The Role of Collective Bargaining in the Global Economy: Negotiating for Social Justice*. Cheltenham, UK: Edward Elgar.

Hayter, S. and Weinberg, B. 2011. "Mind the Gap: Collective Bargaining and Wage Inequality." In Hayter, S. (ed.). *The Role of Collective Bargaining in the Global Economy: Negotiating for Social Justice*. Cheltenham, UK: Edward Elgar, 136–186.

Hyman, Richard. 1997. "The Future of Employee Representation." *British Journal of Industrial Relations*, 35(3): 309–336

Ichniowski, C. and Delaney, J. 1990. "Profitability and Compensation Adjustments in the Retail Food Industry." Industrial and Labor Relations Review, 43(3): 183–202.

Jacoby, S.M. ans Mtichell, S.J.B. 1986. "Management Attitudes Toward Two-Tier Pay Plans." Journal of Labor Research, 7(3): 221–237.

Kalleberg, A.L. 2009. "Precarious work, insecure workers: Employment relations in transition." *American Sociological Review*, 74(1): 1–22.

Katz and Kochan, 2004. An Introduction to Collective Bargaining and Industrial Relations (3rd ed.). New York : McGraw Hill Irwin.

Keller, B. and Seifert, H. 2013. "Atypical employment in Germany: Forms, development, patterns". *Transfer*, 19(4): 457–474.

Kenworthy, L. and Pontusson, J. 2005. "Rising Inequality and the Politics of Redistribution in Affluent Countries." *Perspectives on Politics*, 3(3): 449–471.

Kerissey, J. 2015. "Collective Labor Rights and Income Inequality." *American Sociological Review*, 80 (3): 626–653.

Koeniger, W., Leonardi, M. and Nunziata, L. 2007. "Labor Market Institutions and Wage Inequality." *Industrial and Labor Relations Review*. 60 (3): 340–356.

Kristal, T. and Cohen, Y. 2007. "Decentralization of Collective Agreements and Rising Wage Inequality in Israel.". *Industrial Relations*, 46(3), pp. 613–635

Kumar, P. and Acri, L. 1991. Women's Issues and Collective Bargaining Paper presented at the Annual Meeting of the Canadian Industrial Relations Association at Kingston, Ontario, June 2-4, 1991.

Kumar, P. and Schenk, C. 2006. *Paths to Union Renewal*. Peterborough, Ontario: Broadview Press.

Laroche, Mélanie. 2009. "Mondialisation et action collective patronale: deux réalités conciliables? Le cas de l'industrie du vêtement pour homme au Québec." *Relations industrielles/Industrial Relations*, 65(1), 134–154.

Laroche, M. 2012. "Action collective patronale: déclin des associations patronales ou reconfiguration du modèle associatif?" *Revue Canadienne de sociologie-Canadian Review of Sociology*, 49(3), 271–291

Lauzon-Duguay, F., Jalette, P. and Hallé, G. 2010. "Salaires." In P. Jalette, G. Trudeau. *La convention collective au Québec.* 2nd edition, Montréal: Chenelière Éducation.

LÉVESQUE C., MURRAY G., and S. LE QUEUX. (1998). "Transformations sociales et identités syndicales : l'institution syndicale à l'épreuve de la différenciation sociale contemporaine." Sociologies et société, Vol. 30, No. 2, pp. 1–24.

Lin, K.-H. and Tomaskovic-Devey, D. 2013. "Financialization and U.S. Income Inequality, 1970–2008." *American Journal of Sociology*, 118(5): 1–45

Malveaux, J. 1986. "Emerging Two-tier Wage Systems: Employment Opportunity or Wage Attack." *The Urban League Review*, 10(2): 34–44.

Marginson, P. and Sisson, K. 2004. European Integration and Industrial Relations. London: Palgrave/Macmillan.

Martin, J. E. and Heetderks, T. D., 1990. *Two-Tier Compensation Structures: Their Impact on Unions, Employers, and Employees*. Kalamazoo, Mich.: W.E. Upjohn Institute for Employment Research.

Martin, J.E. and Peterson, M. M. 1987. "Two-Tier Wage Structures: Implications for Equity Theory." *The Academy of Management Journal*, 30(2): 297–315

MINISTÈRE DU TRAVAIL. 1998. Vers une équité intergénérationnelle : document de réflexion sur les clauses "orphelin" dans les conventions collectives. Québec: Ministère du Travail du Québec.

MINISTÈRE DU TRAVAIL. 1998. La rémunération à double palier dans les conventions collectives au Québec : Évolution de la situation entre 1991 et 1997. Québec: ministère du Travail.

MINISTÈRE DU TRAVAIL. 1998. Les clauses "orphelin": Analyse de conventions collectives du secteur municipal et du secteur du commerce de détail - magasins d'alimentation. Québec: ministère du Travail.

MINISTERE DU TRAVAIL. 1999a. Les clauses « orphelin » : analyse de conventions du secteur municipal et du secteur du commerce de détail – magasins d'alimentation. Québec: Direction des études et des politiques

MINISTERE DU TRAVAIL. 1999b. Les clauses « orphelin » : analyse de conventions collectives du secteur manufacturier. Québec: Direction des études et des politiques.

TURCOT, Y. 1992. "La rémunération à double palier dans les conventions collectives au Québec : Évolution de la situation entre 1985 et 1990." *Le marché du travail*, 13(11): 9–10, 78–86.

Moller, S., Huber, E. and Stephens, J.D., Bradley, D. Nielsen, F. 2033. "Determinants of Relative Poverty in Advanced Capitalist Democracies." *American Journal of Sociology*, 68(1): 22–51.

Nadeau, D. 2012. "Monopole de représentation syndicale et droits individuels des salariés : l'incontournable défi de la diversité !. *Les Cahiers de droit*, 53(1): 139–159.

OECD. 2004. Employment Outlook. Paris: OECD.

OECD. 2011. Divided We Stand: Why Inequality Keeps Rising. Paris: OECD

Piketty, T. 2014. *Capital in the Twenty-First Century*. Cambridge, MA: The Belknap Press of Harvard.

Rees, A. 1993. "The Role of Fairness in Wage Determination." *Journal of Labor Economics*, 11(1): 243–252

Rose, J.B. and Chaison. G. 1996. "Linking Union Density and Union Effectiveness: The North American Experience." *Industrial Relations*, 35 (1): 78–105.

Thomas, S.L. and Kleiner, M.M. 1992. "The Effect of Two-Tier Collective Bargaining Agreements on Shareholder Equity." *Industrial and Labor Relations Review*, 25 (2): 339-351.

Thomas, S.L. and Morris, M.K. 1992. "The Effect of Two-Tier Collective Bargaining Agreements on Shareholder Equity." Industrial and Labor Relations Review, 45(2): 339–351.

Townsend, A. M. and Partridge, D.M. 1999. "Revisiting Multi-Tier Wage Structure: Equity, Employment Mobility and Tier Effects." *Journal of Labor Research*, 20(4): 605-619.

Truman F. B. 1999. *Why Wages Don't Fall During a Recession*. Cambridge: Harvard University Press.

Tzannatos, Z. 2008. "The Impact of Trade Unions: What Do Economists Say?" In Janine Berg and David Kucera (eds.). *In Defence of Labour Market Institutions: Cultivating Justice in the Developing World*. Basingstoke, UK: Palgrave Macmillan, 150–191.

Walker, J. 1987. *Two-Tier Wage Systems*. Research and Current Issues Series No. 51. Kingston, Ontario: Queens University Industrial Relations Center.

Walsh, D. J. 1988. "Accounting for the Proliferation of Two-Tier Wage Settlements in the U.S. Airline Industry, 1983-1986." *Industrial and Labor Relations Review*, 42(1): 50–62.

Western, B. and Rosenfeld, J. 2011. "Unions, Norms, and the Rise in U.S. Wage Inequality." *American Sociological Review*, 76(4): 513–37